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Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM protein - protein search, using sw model
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0 seq length: 2000000000
                                                                                                                   9:
110:
112:
113:
114:
115:
116:
116:
117:
118:
119:
120:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A_Geneseq_1101:*
1: /SIDS8/gcgdat
2: /SIDS8/gcgdat
                                                                                                 1: /SIDSB/gcgdata/geneseq/geneseqp/AA1980.DAT:*
2: /SIDSB/gcgdata/geneseq/geneseqp/AA1981.DAT:*
3: /SIDSB/gcgdata/geneseq/geneseqp/AA1981.DAT:*
4: /SIDSB/gcgdata/geneseq/geneseqp/AA1983.DAT:*
5: /SIDSB/gcgdata/geneseq/geneseqp/AA1983.DAT:*
6: /SIDSB/gcgdata/geneseq/geneseqp/AA1985.DAT:*
7: /SIDSB/gcgdata/geneseq/geneseqp/AA1985.DAT:*
7: /SIDSB/gcgdata/geneseq/geneseqp/AA1987.DAT:*
8: /SIDSB/gcgdata/geneseq/geneseqp/AA1987.DAT:*
8: /SIDSB/gcgdata/geneseq/geneseqp/AA1987.DAT:*
10: /SIDSB/gcgdata/geneseq/geneseqp/AA1990.DAT:*
11: /SIDSB/gcgdata/geneseq/geneseqp/AA1990.DAT:*
12: /SIDSB/gcgdata/geneseq/geneseqp/AA1993.DAT:*
13: /SIDSB/gcgdata/geneseq/geneseqp/AA1993.DAT:*
14: /SIDSB/gcgdata/geneseq/geneseqp/AA1993.DAT:*
15: /SIDSB/gcgdata/geneseq/geneseqp/AA1995.DAT:*
16: /SIDSB/gcgdata/geneseq/geneseqp/AA1995.DAT:*
17: /SIDSB/gcgdata/geneseq/geneseqp/AA1995.DAT:*
18: /SIDSB/gcgdata/geneseq/geneseqp/AA1999.DAT:*
19: /SIDSB/gcgdata/geneseq/geneseqp/AA1999.DAT:*
19: /SIDSB/gcgdata/geneseq/geneseqp/AA1999.DAT:*
20: /SIDSB/gcgdata/geneseq/geneseqp/AA1999.DAT:*
21: /SIDSB/gcgdata/geneseq/geneseqp/AA1999.DAT:*
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252
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      522463 seqs, 74073290 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STGHSGSQHSHTTTQGRSDA.....TSRETRDQEQSGDGSRHSGS
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45	44	43						37						31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14		12
62	62	62	62	62	62	62	62	62	62.5	63	63	63	63	63	ω.	ω.	63.5	ω.	ω	ω.		64	65	65	66	σ.	66.5	δ.	67	67		69	70.5
24.6		•		•	•		•	24.6	•	•	٠	٠		•	•	٠	25.2	•	•		•	25.4	•	•	26.2	•	26.4	•		•	26.6	27.4	28.0
476	442	431	387	276	234	98	61	61	189	1850	759	529	529	529	328	326	290	288	282	280	3025	16	655	413	860	674	594	330	574	443	306	717	1275
19	22	22	22	21	22	21	22	22	22	22	22	21	19	19	21	21	21	21	21	21	10	20	22	22	19	21	22	21	22	22	21	22	21
AAW37241	AAM40816	AAG74995	AAG62626	AAB56814	AAB94508	AAG01314	AAM31309	AAM18795	AAG82799	AAB72210	AAB94613	AAY44989	AAW85055	AAW80498	AAG46428	AAG24814	AAG46429	AAG24815	AAG46430	AAG24816	AAP93284	AAY22952	AAB70771	AAY72163	AAW63700	AAY53044	AAU12176	AAY70227	AAM41855	ААМ40069	AAB54149	3158	AAY44262
Heterodera glycine	Human polypeptide	Human colon cancer	Human RNA helicase	Human prostate can	Human protein sequ	Human secreted pro	Peptide #5346 enco	Peptide #5229 enco	S. epidermidis ope	Modified chicken v	Human protein sequ	Human epidermal pr	Human protein desi	A protein designat	Arabidopsis thalia	Arabidopsis thalia	Arabidopsis thalia		Arabidopsis thalia	Arabidopsis thalia	Sequence of clone	Synthetic peptide	Murine neutral cer	Human RNA metaboli	Receptor type tyro	Human secreted pro	Human PRO4988 poly	Human RNA-associat	Human polypeptide	Human polypeptide	ч	seguen	Human cell cycle r

ALIGNMENTS

RESULT AAW50747

AAW50747 standard; Protein;

49 Ą

Pepide S-47-S derived from filaggrin.

31-JUL-1998 AAW50747;

(first entry)

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XXXX
XXX
XXX
                                              Arnaud M, Dalbon P,
Sebbag M, Serre G,
Girbal-Neuhauser E,
Artificial antigen recognised by anti-filaggrin auto-antibodies modified form of filaggrin with citrulline replacing at least or
                                                                                                                                                                                                                      Filaggrin; antigen; anti-filaggrin; rheumatoid polyarthritis; citrulline; antibody.
                               WPI; 1998-207042/18.
                                                                                        (INMR ) BIOMERIEUX SA.
                                                                                                            30-AUG-1996;
                                                                                                                               01-SEP-1997;
                                                                                                                                                   05-MAR-1998.
                                                                                                                                                                     WO9808946-A1.
                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                        Homo sapiens.
                                                                                                            96FR-0010651
                                                                                                                                97WO-FR01541
                                               Jolivet M;
Simon M, Vincent Jolivet-Reynaud C;
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Result No.

Score

Match

Length

BB

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Description

SUMMARIES

Query

252 252 208 208 208 208 207 73.5 72.5 70.5

100.0 100.0 82.5 82.5 82.5 82.1 29.2 28.8 28.8 28.6

AAW50747 AAY23931 AAY22954 AAY22956 AAY22956 AAY22957 AAAX13320 AAAX1759 AAAX1759 AAAX1759

Pepide S-47-S deri Filaggrin-derived Human filagrin seq Human filagrin seq Human filagrin seq Human filagrin seq Murine Natural Kil Peptide #8193 enco Peptide #12118 enco Peptide #12118 sequ Human protein sequ Human CIF130 prote

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AAY23931
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Best Local Similarity
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            specifically recognized by anti-filaggrin autoantibodies present in the serum of patients suffering from rheumatoid arthritis, and are derived from all or part of the sequence of a filaggrin unit. At least one arginine residue is substituted for citrulline. The antigenic peptide is used to obtain medicines to inhibit anti-filaggrin autoantibodies from binding their antigenic target. Pharmaceutical compositions containing the citrulline peptides are
                                                                                                                                                                                                                                                                                                                                                                                                                                    Arnaud M,
Sebbag M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an artificial antigen recognised specifically by anti-filaggrin autoantibodies present in the serum of patients with rheumatoid polyarthritis. The artificial antigen is a recombinant or synthetic polypeptide containing at least part of a sequence derived from a filaggrin unit, or related molecule, by substitution of at least larginine residue by citrulline. The antigens are used for in vitro diagnosis of rheumatoid polyarthritis from complex formation with antibodies in usual immunoassays. Replacement of arginine by citrulline is essential for antigen-specific recognition by antibodies. This sequence represents a peptide fragment of filaggrin corresponding to residues 71-119 and contains 6 arginine residues.
                                                                                                                                                                                                                                                                                                       Filaggrin-derived citrulline peptide antigens, useful for treatment
                                                                                                                                                                                 AAY23931-33 represent filaggrin-derived peptide antigens. They are
                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                           of rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-407426/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYTO-) UNIV TOULOUSE SABATIER PAUL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-JUL-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Filaggrin; antigen; autoantibody; rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Filaggrin-derived peptide antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY23931;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY23931 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N
for the treatment of rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49;
                                                                                                                                                                                                                                        Page 17; 26pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Dalbon P,
Serre GBR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97FR-0016672
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Girbal NE,
, Simon M,
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                                                                                                                                                                                                                                           French.
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Pred. No. 2.6e-23;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Vincent
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jolivet M;
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2 TGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS

49

Query Match Best Local Matches

39;

Conservative

Pred. No. 3.9e 1; Mismatches Score 208; Pred. No. 3.

DB 20; .9e-17;

Length 330; Indels

0,

Gaps:

0;

Similarity

82.5%;

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AAY22954
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                     AAY22954-57 represent amino acid sequences of human filagrin clones. The specification describes peptides derived from any variant of natural filagrin or any variant of intermediate filament proteins. These peptides contain at least one citruline residue which is crucial for reacting with antibodies that are present in sera from patients with rheumatoid arthritis. The peptides constitute immunogenic determinants of antibodies present in patients with rheumatoid arthritis. The peptides, antibodies, immunotoxins and intermediate filament proteins can be used for the preparation of a therapeutic or of a diagnostic for rheumatoid arthritis. The peptides can also be used for the diagnostic for an autoantigen and a rheumatoid arthritis specific autoantibody. The products can also be used for the diagnosis and treatment of other autoimmune diseases e.g. systemic lupus erythematosus, discoid lupus erythematosus, scieroderma, dermatomyositis, or Sjogrens syndrome.
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Best Local
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Sequence
                                                                                                                                                                                                                                                                                      New peptide derived from intermediate filament proteins
                                                                                                                                                                                                                                                                                                                      WPI; 1999-385357/32
                                                                                                                                                                                                                                                                                                                                                 Meheus L,
                                                                                                                                                                                                                                                          Example 1; Fig 2; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                            (INNO-) INNOGENETICS NV
                                                                                                                                                                                                                                                                                                                                                                                                         09-APR-1998;
28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9928344-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dermatomyositis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antigen; immunotoxin; autoantigen; autoantibody; autoimmune disease; systemic lupus erythematosus; discoid lupus erythematosus; scleroderma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Filaggrin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human filagrin sequence of clone HB2641.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY22954;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY22954 standard; peptide; 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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49; Conserv
 330
                                                                                                                                                                                                                                                                                                                                                 Raymackers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           intermediate filament protein;
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97EP-0870195
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sjogrens syndrome.
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100.0%; ;
itive 0;
                                                                                                                                                                                                                                                                                                                                                 Union
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 252; DB 20;
Pred. No. 2.6e-23;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antibody; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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RESULT
AAY22955
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                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY22954-57 represent amino acid sequences of human filagrin clones. The specification describes peptides derived from any variant of natural filagrin or any variant of intermediate filament proteins. These peptides contain at least one citrulline residue which is crucial for reacting with antibodies that are present in sera from patients with rheumatoid arthritis. The peptides constitute immunogenic determinants of antibodies present in patients with rheumatoid arthritis. The peptides, antibodies, immunotoxins and intermediate filament proteins can be used for the preparation of a therapeutic or of a diagnostic for rheumatoid arthritis. The peptides can also be used for identifying compounds which modulate the interaction between an autoantigen and a rheumatoid arthritis specific autoantibody. The products can also be used for the diagnosis and treatment of other autoimmune diseases e.g. systemic lupus erythematosus, discoid lupus erythematosus, scleroderma, dermatomyositis, or Sjogrens syndrome.
                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Filaggrin; intermediate filament protein; antibody; rheumatoid arthritis; antigen; immunotoxin; autoantigen; autoantibody; autoimmune disease; systemic lupus erythematosus; discoid lupus erythematosus; scleroderma;
                             AAY22956
                                                                          AAY22956 standard;
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Fig 2; 73pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New peptide derived from intermediate filament proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Meheus L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-APR-1998;
28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dermatomyositis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-AUG-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INNO-) INNOGENETICS NV
                                                                                                                                                                                              75
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                                                                                                                                                                                                                2 TGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS 49
                                                                                                                       ຫ
                                                                                                                                                                                       sghsgshhshttsqgrsdashgqsgsrsasrqtrndeqsgdgsrhsgs
                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                            330 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98EP-0870078
97EP-0870195
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                                                                       peptide; 330
                                                                                                                                                                                                                                                                                                              82.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of clone HB2642.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Union
                                                                                                                                                                                                                                                                                     Score 208; DB 20;
Pred. No. 3.9e-17;
4; Mismatches 5
                                                                       ₽
                                                                                                                                                                                                                                                                                                                                  Length 330;
                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                        0;
AAY22957
ID AAY2
XX
XX
AC AAY2
AAY22957
A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY2294-57 represent amino acid sequences of human filagrin clones. The specification describes peptides derived from any variant of natural filagrin or any variant of intermediate filament proteins. These peptides contain at least one citrulline residue which is crucial for reacting with antibodies that are present in sera from patients with rheumatoid arthritis. The peptides constitute immunogenic determinants of antibodies present in patients with rheumatoid arthritis. The peptides, antibodies, immunotoxins and intermediate arthritis. The peptides, antibodies, immunotoxins and intermediate filament proteins can be used for the preparation of a therapeutic or of a diagnostic for rheumatoid arthritis. The peptides can also be used for identifying compounds which modulate the interaction between an autoantigen and a rheumatoid arthritis specific autoantibody. The products can also be used for the diagnosis and treatment of other autoimmune diseases e.g. systemic lupus erythematosus, discoid lupus erythematosus, scleroderma, dermatomyositis, or Sjogrens syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                            Filaggrin; intermediate filament protein; antibody; rheumatoid arthriti antigen; immunotoxin; autoantigen; autoantibody; autoimmune disease; systemic lupus erythematosus; discoid lupus erythematosus; scleroderma;
                                                                                                                                          Human filagrin sequence of clone HB2648
                                                                                                                                                                                                                                         AAY22957;
                                                                                                                                                                                                                                                                                     AAY22957 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New peptide derived from intermediate filament proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-385357/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (INNO-) INNOGENETICS NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-APR-1998;
28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-NOV-1998;
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systemic lupus erythematosus; discoid lupus erythematosus; scleroderma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Filaggrin; intermediate filament protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human filagrin sequence of clone HB2650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-AUG-1999 (first entry)
                        dermatomyositis;
                                                                                                                                                                                       20-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Meheus L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dermatomyositis;
                                                                                                                                                                                                                                                                                                                                                                                                          75
                                                                                                                                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
39; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Fig 2; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Raymackers J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   82.5%;
nilarity 81.2%;
Conservative
                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΑĄ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98EP-0870078
97EP-0870195
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                        Sjogrens syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Union
                                                                                                                                                                                                                                                                                        330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 208; DB 20;
Pred. No. 3.9e-17;
4; Mismatches 5;
                                                                                                                                                                                                                                                                                        A
                                                                     rotein; antibody; rheumatoid arthritis;
autoantibody; autoimmune disease;
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autoantibody; autoimmune disease;
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Length 330; Indels

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Gaps

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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                           Matches
              09-JUL-1991
                                          US7535206-A
                                                                                 Peptide
                                                                                                           Protein
                                                                                                                                                    Homo sapiens
                                                                                                                                                                             NK; cytotoxic
                                                                                                                                                                                                     Murine Natural Killer receptor.
                                                                                                                                                                                                                                  22-OCT-1991
                                                                                                                                                                                                                                                             AAR13320
                                                                                                                                                                                                                                                                                     AAR13320 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      erythematosus, scleroderma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Fig 2; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Meheus L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-APR-1998;
28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9928344-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New peptide derived from intermediate filament proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                            39; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Raymackers J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            330 AA;
                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                            drugs; tumour cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98EP-0870078
97EP-0870195
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                                                                                                           Location/Qualifiers
8..982
                                                                 /label= partial_signal_peptide
                                                                                            /label= mature_NK_receptor
                                                                                                                                                                                                                                                                                                                                                                                                                    82.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Union
                                                                                                                                                                                                                                                                                     982 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dermatomyositis, or Sjogrens syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                      Score 207; DB 20;
Pred. No. 5.1e-17;
                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 330;
                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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RESULT
AAM21759
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Best Local
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                                                                                                                                                                                                                                                                                               04 - FEB - 2000;
26 - MAY - 2000;
30 - JUN - 2000;
03 - AUG - 2000;
                                                                    WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Overlapping clones, which make up the cDNA sequence from which this sequence was deduced, were isolated from a murine PBL cDNA library prepared in lambda gtl0. The purified protein can mediate the cytolytic activity of mammalian cells. It specifically distinguishes tumour cells making it a candidate for the development of products
                                                                                                                                                                                                                                                  21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001; 2001WO-US00670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200157278-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide #8193 encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM21759 standard; Protein; 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 2; 30pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA encoding a natural killer cell receptor - used to develop prods. for the immuno-detection and immuno-therapy of tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ortaldo J, Young H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (USSH ) NAT INST OF HEALTH.
                                                                                                                                                                      (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAM21759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         See also AAQ13114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-JUN-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-JUN-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  693 ssgrsgskssrsrsssrsytrsrsrslptsrslsrspssrshspnkysdgsqhsrs 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 STGHSGSQHSHTTTQGRS----DASRGSSGSRSTSRETRDQEQS-----GDGSRHSGS 49
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1991-245694/33.
DB; AAQ13115.
                                                                    2001-488901/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 39.3
22; Conservative
                                                                                                                                                                      MOLECULAR DYNAMICS
                                                                                                                    Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       982 AA;
                                                                                                                                                                                                                                             2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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39.3%;
                                                                                                                      Chen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        probe for measuring cervical gene expression
                                                                                                                                                                      INC
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Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells -

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Best Local
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                                                                                                                                                                                                                         30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
see AAI31315-AAI57546). The present sequence is a peptide encoded by on such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived human genetic discrease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to human single exon nucleic acid probes (SENF: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENFs are derived from human HeLa cells. The SENFs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably
                                                                                                                                                                                                                                                          04-FEB-2000;
26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                    genetic
                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide #12118 encoded by probe for
                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAM38081 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                Human genome-derived single analyzing gene expression in
                                                                                                                                                                                                                                                                                             30-JAN-2001;
                                                                                                                                                                                                                                                                                                                   09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                 Probe; microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAM38081;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Note: The sequence data for this patent did not specification, but was obtained in electronic for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cervical cancer.
                                                                             Claim
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                                                                                                                                                                             MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                     disorder
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2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0024263.
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2000US-0207456.
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                                                                          ID No 38350; 654pp;
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                                                                                                                                                                                                                                                                                                                                                                                               human; placenta; antenatal diagnosis;
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                                                                                                                                                        Chen W,
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                                                                                                           exon nucleic acid
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Pred.
                                                                                                                                                        Rank DR
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                                                                                                                                                                                                                                                                                                                                                                                                                    measuring placental gene expression.
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format
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       CC The present invention describes primer sets for synthesising 5602 CC full-length cDNAs defined in the specification. Where a primer set CC comprises: (a) an oligo-dT primer and an oligonucleotide complementary CC to the complementary strand of a polynucleotide which comprises one of CC the 5602 nucleotide sequences defined in the specification, where the CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination of a oligonucleotide comprising a sequence complementary to the CC complementary strand of a polynucleotide which comprises a 5'-end CC sequence and an oligonucleotide comprising a sequence complementary to a complementary to a complementary to a complementary to a compount of comprises a 3'-end sequence, where the CC oligonucleotide comprises a 3'-end sequence, where the CC oligonucleotide comprises at least 15 nucleotides and the combination of CC the 5'-end sequence/3'-end sequence is selected from those defined in CC the specification. The primer sets can be used in antisense therapy and CC in gene therapy. The primers are useful for synthesising polynucleotides, particularly full-length cDNAs. The primers are also useful for the CC detection and/or diagnosis of the abnormality of the proteins encoded by CC almostage the full-length cDNAs. The primers allow obtaining of the full-length CDNAs easily without any specialised methods. AAH3363 to AAH3628 and CC AAH33633 to AAH38742 represent human cDNAs sequences; and AAH3628 and CC AAH33633 to AAH3629 to AAH3630 to A
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Best Local Similarity
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11-JAN-2000;
02-MAY-2000;
09-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   full-length cDNAs de and/or diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-318749/34.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human protein sequence SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID 12809;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   for synthesizing polynucleotides, particularly the cDNAs defined in the specification, and for the det nosis of the abnormality of the proteins encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNAS
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2000JP-0183767.
2000JP-0241899.
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99JP-0300253
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Pred. No. 0.
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                                                                                                                                                                                                                                                                                                                                                                                                ROM;
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                                                                                                                                                                                                                                                                                                                                                                                              English.
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RESULT
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The invention provides a human CIF150/hTAFIII50 (CT) polypeptide that is CC involved in mitosis and cell cycle progression. The CT protein CC recognises and selects TATA-less core promoters for cell cycle specific cells. The CT protein plays a role in establishing gene expression CC patterns necessary for progression through the cell cycle. CT is a cell cycle progression transcriptional regulator of cell cycle progression through CC G2/M. The products can be used for affecting mitosis or cell cycle CC or cell cycle progression. Decreased CT gene expression can be used to treat conditions characterised by high rates of mitosis, such as conceptable conditions characterised by high rates of mitosis, such as cell cycle progression and treating disorders. Cells in which CT expression has been decreased can also be used to identify genes whose expression is cell populations in vitro or for treating disorders such as anemia, which care characterised by lowered rates of mitosis. The CT and its binding celement (sequence AAX91487) can be used to increase expression of a gene, either in vitro, such as in a cell culture, or in vivo. The products can
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                                                                                                                                                                                                                                                                                                Claim 23; Page 79-81; 82pp; English.
                                                                                                                                                                                                                                                                                                                            New isolated lCIF150/hTAFII150 polypeptides
                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-444069/37
N-PSDB; AAX91484.
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                                                                                                                                                                                                                                                                                                                                                                                                          Kautmann J;
                                                                                                                                                                                                                                                                                                                                                                                                                                     (CHIR ) CHIRON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-DEC-1998;
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Misc-difference 1091
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Misc-difference 1255
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Misc-difference 1212
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Misc-difference 1079
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Misc-difference 1233
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                                                                                                                                                                                                                                                                                                                                                                                        Human cell cycle regulator
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              also be used for the diagnosis, prognosis and predicting susceptibility to neoplasia. The present sequence represents a human CIF130 protein that
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(CHIR) CHIRON CORP

12-JUN-1998; 09-DEC-1998;

98US-0089198 98US-0111636

Kaufmann

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                                                                                                                                                                                                           ulcerative colitis; atopic dermatitis; dermatomyositis; osteoporosis; atrophic gastritis; diabetes mellitus; erythema nodosum; pancreatitis; glomerulonephritis; Graves' disease; hypereosinophilia; polymyositis; irritable bowel syndrome; lupus erythematosus; multiple sclerosis; myasthenia gravis; myocardial or pericardial inflammation; hemodialysi. osteoarthritis; rheumatoid arthritis; Sjogren's syndrome; trauma;
                                                                                                                                                                                                                                                                     Addison's disease; neoplastic disorder; immunological disorder; gout; adult respiratory distress syndrome; allergy; anaemia; asthma; cancer; atherosclerosis; bronchitis; cholecystitis; Crohn's disease; scleroderma;
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                                                                                                                                                                                          proteins, called pancreatic cancer antigens, given in AAB54008 AAB54466. The human pancreatic cancer antigens have cytostatic,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiinflammatory; cardiant; gene linkage analysis; tissue identif neural; immune system; muscular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nootropic; immunomodulatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB54149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB54149 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          autoimmune thyroiditis, complications of cancer, hemodialysis, a extracorporeal circulation, trauma, and viral, bacterial fungal,
               analysis, tissue identification and/or typing and a
                                                                                                                                 in gene therapy. The polynucleotide and proteins can be used for preventing, treating, or ameliorating a medical condition or in assays
                                                                                                                                                                                                                                                      Claim 11;
                                                                                                                                                                                                                                                                                                                                                                                         Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-MAR-2000; 2000WO-US05989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200055320-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pulmonary; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human pancreatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                     (HUMA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match
 diagnostic
                                                                                                                                                                                                                                                                               nucleic acid that is a pancreatic cancer antigen for preventing, ating, or ameliorating a medical condition, particular pancreatic cer, or for use in assays for diagnosing a pathological condition
                                                                                                                                                                                                                                                                                                                                                            2000-579444/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pancreas; pancreatic cancer; pancreatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l Similarity
19; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                     HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                              AAC98914
                                                                                                                                                                                                                                                    Page 1037-1038;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnosis; identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protozoal,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cancer antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tissue identification; tissue typing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27.4%; 38.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and helminthic infections
 The
                                                                                                                                                                                                                                                    1379pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 renal;
proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fication; cytostatic; neu
relaxant; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. 3.6
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein sequence SEQ
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 can
                                                                                                                                                                                                                          pancreatic cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chromosome mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22;
used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cancer antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 717
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        neuroprotective;
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               ed to design nucleic osome mapping, linkage variety of forensic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ij
                                                                                                                                                                                                         AAB54008 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gynaecological;
                                                                                                                                                                              contraceptive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NO:601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              forensic;
                                                                                                                                                              and can be used
 antibodies
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25-APR-2000; 2000US-0552317.

09-JUL-2000; 2000US-0598042.

19-JUL-2000; 2000US-0620312.

03-AUG-2000; 2000US-0653450.

14-SEP-2000; 2000US-0652191.

19-CCT-2000; 2000US-0639336.

29-NOV-2000; 2000US-0727344.
                                                                                                                                                                                                                                                                                                                                                                                             Tang YT,
Wang J,
Zhao QA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   which are used to purify, detect and target the polypeptides, including both in vivo and in vitro diagnostic and therapeutic methods. The proteins can be used to treat or prevent neural, immune system, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal or proliferative disorders. AAC99232 to AAC99240 and AAB54467 represent
The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peripheral nervous system; cNS;
Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                    Novel nucleic acids and polypeptides, useful for such as central nervous system injuries -
                                                                                                                                                                                                                                                                                                                   WPI; 2001-442253/47.
N-PSDB; AAI59225.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-DEC-2000; 2000WO-US34263
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human polypeptide SEQ ID NO 3214.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAM40069;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAM40069 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequences used in the exemplification of the present invention.
                                                                                                                                                                                Example 5; SEQ ID NO 3214; 10078pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140 sgssksshsksrsrsrsgsrsrsksrsrsqsrsrskkeksrspskdksrsrshs 193
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                                                                                                                                                                                                                                                                                                                                                                                             Liu C,
Wang Z,
Zhou P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               306 AA;
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"ahrman T, Xu
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Chen R,
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Yang Y,
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                                                                                                                                                                                                                                                                                                                                                                                                                     Yang
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                                                                                                                                                                                                                                                               treating
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Wang
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Best Local
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                                                                                                                                                                                                                                                      Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activity, Chemotactic/Chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and assays for receptor activity, arthritis and inflammation, leukaemias and
                                                                                                                                                                                                                                       assays for receptor activity, arthritis C.N.S disorders.
                                                                                                                                                                 Sequence
                                                                                                                                                                                                     specification.
                                                                                                                                                                                                                      Note: The sequence data for this patent did not
                                                                                                                                                                                                                                                                                                                                                                     localised neuropathies and central nervous system diseases, such as
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                                    ب
                  STGHSGSQHSHTTT--QGRSDASRGSSGSRSTSRETRDQEQSG---DGSRHSGS
ntssnsrqrsgwssgrsgrsgrsggrs-grqsrqgsrsgsrqdgrrrsgn
                                                                        Similarity 38.º
21; Conservative
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PCT-US94-04496-55
US-09-110-517-2
US-08-944-04496-55
US-09-184-09-120
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US-08-18-25-073-3
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US-08-125-099-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.5
Compugen Ltd
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Sequence 4, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 3, Appli
Sequence 3, Appli
             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
                             55, Appl
55, Appl
3, Appli
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120, App
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12
                                              TYPE: amino acid

STRANDENNESS: sing

TOPOLOGY: linear

IMMEDIATE SOURCE:

LIBRARY: GenBank

CLONE: 1644847

US-08-910-925-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1
US-08-910-925-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application US/08910925 Patent No. 6162601
Query Match
                                                                                                                                                                                                                                                                                         COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fast560 for Windows Version 2.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/910,925
FILING DATE: Herewith
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: BPLICATION NUMBER:
TILING DATE:
APPLICATION NUMBER: 36,749
REGISTRATION NUMBER: 36,749
REGISTRATION NUMBER: 36,749
                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: PF-0:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166
TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Bandman, Olga
APPLICANT: Lal, preeti
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN PININ SE
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 3174 PORT
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304
                                                                                                                                                                                                             TELEX:
                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Incyte Pharmaceuticals, Inc
STREET: 3174 Porter Drive
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US-08-320-559-30
US-08-545-860D-30
PCT-US94-04496-30
US-08-549-004A-5
US-08-649-004A-5
US-08-723-415B-10
US-08-723-415B-11
US-08-602-846-2
US-09-189-627A-11
US-09-189-627A-11
US-09-189-627A-11
US-09-189-627A-11
US-09-677-862-2
US-09-252-571-2
US-09-3434-065-2
US-09-434-065-2
US-09-434-065-2
US-09-434-065-2
US-09-434-065-2
US-09-434-065-2
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 Score 73;
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 DB
 4.
 Length 743;
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Sequence 30, Appl
Sequence 30, Appl
Sequence 30, Appli
Sequence 5, Appli
Sequence 5, Appli
Sequence 11, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 2, Appli
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Result

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Score

770.5 69.55 69.55 69.55 69.55 69.55 69.55 69.55 69.55 69.55 69.55 69.55

Minimum DB seq Maximum DB seq

Searched

Scoring table: Sequence: Perfect score: Title:

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Database

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; ORGANISM: human
US-09-208-742-4
                                                                                                           RESULT 4
US-08-910-925-4
                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapien US-09-332-295-2
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TITLE OF INVENTION: CIF150/hTAFII150 is Necessary for Cell
TITLE OF INVENTION: CYCLE Progression
FILE REPERENCE: 1453.002
CURRENT APPLICATION NUMBER: US/09/208,742
CURRENT FILING DATE: 1998-12-10
NUMBER OF SEQ ID NOS: 6
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/09332295 Patent No. 6303372 GENERAL INFORMATION:
                                                     Sequence 4, Application US/08910925 Patent No. 6162601 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/09208742 Patent No. 6174679 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 2
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Best Local Similarity
Matches 15; Conserv
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                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Kaufmann, Joerg
TITLE OF INVENTION: CIFT130 INHIBITS CELL CYCLE PROGRESSION
FILE REPERENCE: 200130.456 / 1513.003
CURRENT APPLICATION NUMBER: US/09/332,295
CURRENT FILING DATE: 1999-06-11
NUMBER OF SEO ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 1261
 APPLICANT:
                                                                                                                                                                                   847 GSNGKRERYTENRGSSRHSHGETGNRHS----DSPRHGDGGRH 885
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Lal, Preeti
Shah, Purvi
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                                    Bandman, Olga
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US-08-910-925-1
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                          2IP: 94304

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatil
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:

NAME: Billings, Lucy J.

REGISTRATION NUMBER: 36,749

REFERENCE/DOCKET NUMBER: PF-C

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Lal, Preeti
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN PININ SPLICE VARIANT
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: I
FILING DATE: Herewith
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: HUMAN PININ SPLICE VARIANT NUMBER OF SEQUENCES: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMMEDIATE SOURCE:
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SOFTWARE: FastSEQ for Windows Version
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STATE: CA
                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                           STATE:
                                                                                                                                                                                                                                                                                                                     CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS 49
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                                                                                                  IBM Compatible
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Gaps

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US/08/910,925

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/08964268
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: WEI, Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
TELECHIONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                          PRIOR DATE: HEREWITH
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/030,189
FILING DATE: 04-NOV-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEEFE, ERIC K.
 REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 717 amino acids
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
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                                                                                                                                                                                                                                          COMPUTER:
                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. STREET: 1100 NEW YORK AVENUE, NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LIBRARY: FIB
CLONE: 53219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
TOPOLOGY: 11:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: Herewi
                                                   REGISTRATION NUMBER:
                                                                                                                                                                      APPLICATION NUMBER:
TELEPHONE:
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KAZANTSEV, ALEKSEY G
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RUBEN, STEVEN M
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38.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                   HUMAN BLUE-LIGHT PHOTORECEPTOR hCRY2
                                                                                                                                                                        US/08/964,268
                                                 36,688
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                                   1488.0750001/EKS
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                                                                                                                                                                                                        Version #1.30
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RESULT 7
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                                                                                                                                                                                                                                                                                                                                                                                   Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 55,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 27.0%; Matches 17; Conservative
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Best Local Similarity
                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Croce, Carlo
APPLICANT: Canaani, Eli
TITLE OF INVENTION: Diagnostics, Therapeutics and Methods
TITLE OF INVENTION: for Detection and Treatment of Acute;
TITLE OF INVENTION: Resulting from Chromosome Abnormaliti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 4
CURRENT APPLICATION DATA:
              SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2644 TSSNHSETGDSRQPTCSMGASGSKKRSRPSRGLQERLLRARGGACGGLWDESEGGYSQFH 2703
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                                                                                                                                                       STREET: One Liberty Place, 46th floor CITY: Philadelphia STATE: Pennsylvania
                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               47 SGS 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 03-31-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                        COUNTRY: UZIP: 19103
                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 HSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQ 37
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
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                                                                                                                                                                                                          Woodcock, Washburn, Kurtz, Mackiewitz & No. 6040140ris
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                                                                                                                                                                                                                                                                             for Detection and Treatment of Acute Leukemias Resulting from Chromosome Abnormalities in the All-1 Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25.8%;
41.2%;
US/08/545,860D
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Pred. No. 24;
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PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/ FILING DATE: 09-DEC-1992

PCT/US92/10930

PRIOR APPLICATION DATA:

07-MAR-1996

APPLICATION NUMBER: FILING DATE: 0 CLASSIFICATION:

DATE:

22-APR-1994

PCT/US94/04496

MEDIUM TYPE:

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US-08-545-860D-55
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Best Local Similarity
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MOLECULE TYPE: P
HYPOTHETICAL: NC
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TELEFAX: (215) 568-34
INFORMATION FOR SEQ ID NO:
                                                                                                                                          TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
COMPUTER READABLE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/971,094
FILING DATE: 30-OCT-1992
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APPLICATION NUMBER: US 08/320,559
FILING DATE: 11-0CT-1994
                                                                                                                               CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER: US 07/888,839
FILING DATE: 27-MAY-1992
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PRIOR APPLICATION NUMBER: US 08/327,392
                                                                                                                                                                                                              APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 33
REFERENCE/DOCKET NUMBER:
                              COUNTRY:
                                                                                             ADDRESSEE: Woodco
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/805,093 FILING DATE: 11-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
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                19103
                                                            T: One Liberty Place, 46th floor
Philadelphia
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                                             Pennsylvania
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                                                                                                          Woodcock, Washburn, Kurtz, Mackiewitz &
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                                                                                                                                            Diagnostics, Therapeutics and Methods
for Detection and Treatment of Acute Leukemias
Resulting from Chromosome Abnormalities in the All-1
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Pred. No. 15;
                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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RESULT 11 US-08-257-073-3

Sequence 3, Application US/08257073 Patent No. 5766597 GENERAL INFORMATION:

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US-09-110-517-2
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Best Local Similarity 34.8
                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 51
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2
LENCTH: 1581
                                                                                  Query Match
Best Local Similarity
                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/09110517A Patent No. 6248520
                                                                                                                                                                                                                                                                                        APPLICANT: Roeder, Robert G
APPLICANT: Fondell, Joseph D
APPLICANT: Fondell, Joseph D
APPLICANT: Yuan, Chao X
APPLICANT: Ito, Mitsuhiro
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING NUCLEAR HORMONE
TITLE OF INVENTION: RECEPTOR COACTIVATORS AND USES THEREOF
EILE REFERENCE: 600-1-224
CURRENT APPLICATION NUMBER: US/09/110,517A
                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 1998-07-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (215) 568-343 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
HYPOTHETICAL: N
ANTI-SENSE: NO
1100 HSSSSSSASTSGKMKSSKSEGSSSSKLSSSMYSSQGSSGSSQSKNSS 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: DeLuca Esq., mark
REGISTRATION NUMBER: 33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (215) 568-3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      275 SSSASSSSHHEASTQETSESSRESKGKKSSSHSLSHKGKKLSSGKG 320
                                4 HSGSQHSHTTTQG--RSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQ---SGDG 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1093 amino acids
                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (215) 568-3439
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                                                                                    24.2%;
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                                                                                    Score 61;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8;
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Pred. No. 15;
                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                    DB 4; Length 1581; 26;
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                                                                      24;
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                                                                  Indels
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Best Local Similarity 31.8
Matches 14; Conservative
                                                                                                                                                                                 Sequence 120, Application US/08184009 Patent No. 5833975
                                                                                                                                                                 GENERAL INFORMATION:
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SEQUENCE CHARACTERISTICS:
LENGTH: 984 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/672,183
FILING DATE: 20-MAR-1991
ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                           TITLE OF INVENTION: RECOMBINANT VIRUS IMMUNOTHERAPY NUMBER OF SEQUENCES: 217
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: FRAGMENT TYPE:
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APPLICATION NUMBER:
FILING DATE: 18-MAR-
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APPLICANT: Tine, John A.
TITLE OF INVENTION: MALARIA RECOMBINANT POXVIRUS VACCINE
NUMBER OF SEQUENCES: 143
                                                                                                                APPLICANT: Tartaglia, James APPLICANT: Cox, William I.
                                                                                                                                                   APPLICANT:
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APPLICATION NUMBER: US 08/075,783
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                                                                                                                                                                                                                                                                                   NAME: Frommer, William S.
REGISTRATION NUMBER: 25,506
REFERENCE/DOCKET NUMBER: 454310-2570
                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
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                                             ADDRESSEE:
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New York
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                            530 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (212) 840-3333
(212) 840-0712
                                                                                                                                                Paoletti, Enzo
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linear
                                                 Curtis,
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internal
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                                               Morris & Safford
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                                                                                                                                                                                                                                                                                                                                                      8;
                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 984;
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RESULT 13
US-08-458-356-120
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; FRAGMENT TYPE:
US-08-184-009-120
                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Paoletti, Enzo
APPLICANT: Tartaglia, James
APPLICANT: Cox, William I.
TITLE OF INVENTION: RECOMBI
NUMBER OF SEQUENCES: 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 120,
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
        CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/184
FILING DATE: 19-JAN-1994
ATTORNEY_AGENT INFORMATION:
NAME: Frommer, William S.
REGISTRATION NUMBER: 25,506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (212) 840-071
TELEX: 425066CURTMS
INFORMATION FOR SEQ ID NO:
                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 02-JUN-19
                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 25,506
REFERENCE/DOCKET NUMBER: 45
TELECOMMUNICATION INFORMATION:
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COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 19-JAN CLASSIFICATION: 43
                                                                                                                                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 31.8 nes 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                   COUNTRY: US
ZIP: 10036
                                                                                                                                                                                                                                                                                                    STATE:
                                                                                                                                                                                                                                                                                                                    STREET: 530 Fi
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ZIP: 10036
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Curtis, Morris & Safford STREET: 530 Fifth Avenue
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                                                                                                                                                                                 PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                Floppy disk
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                                                                                                                                 02-JUN-1995
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                                                                                US 08/184,009
                                                                                                                                                  US/08/458,356
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454310-2530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 60; DB 2; 
Pred. No. 20;
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TELEX: 425066CURTMS
INFORMATION FOR SEQ ID NO: 120:

TELEPHONE:

(212) 840-3333 (212) 840-0712

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Matches
Query Match
Best Local Similarity
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                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
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TOPOLOGY: line
MOLECULE TYPE: |
FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/184,009
FILING DATE: 19-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Frommer, William S.
                                                                                                                                                                                                                                        NAME: Frommer, William S.
REGISTRATION NUMBER: 25,506
REFERENCE/DOCKET NUMBER: 454310-2530
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 555
STREET: 956
CITY: New York
CTATE: NY
                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 984 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: RECOMBINANT VIRUS IMMUNOTHERAPY NUMBER OF SEQUENCES: 217
CORRESPONDENCE ADDRESS: ADDRESSEE: Curtis, Morris & Safford
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 984 amino acid
                                                                         MOLECULE TYPE:
FRAGMENT TYPE:
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MEDIUM TYPE: Floppy disk
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TELEFAX: (212) 840-0712
                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 02-JUN
                                                                                                          TOPOLOGY:
                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
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Cox, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ESS: single
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 DB 4;
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                 Length 984;
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Search completed: January 28, 2002, 07:38:09 Job time: 39 sec
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 08/319,544
FILING DATE: 07-OCT-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 514 amino acids
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                                                                                                                                                   Local Similarity 32.0 nes 15; Conservative
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STATE: Virginia
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TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Meuth, Donna M REGISTRATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER:
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              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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          seq length: 0 seq length: 2000000000
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RESULT A32947 A32947 Filaggrin precursor C;Species: Homo sap C;Date: 20-Dec-1989 C;Date: 20-Dec-1989 C;Coccession: A32947 R;McKilley-Grant, L Proc. Natl. Acad. S A;Title: Character: A;Reference number: A;Accession: A32947 A;Status: preliminal A;Molecule type: mRN A;Residues: 1-416 d A;Cross-references: A;Note: the authors	Query Ma Best Loo Matches Matches Oy 1	C:Genetics: A;Gene:GDB:FLG A;Gene:GDB:FLG A;Cross references: A:Map position: 1q21 C:Superfamily: unass C:Keywords: EF hand; F;246-559/Region: fi F:570-893/Region: fi F:570-893/Region: fi F:1074-1397/Region:	C:Accession: A35938 R:Gan, S.O.; McBride, O Blochemistry 29, 9432-9 A;Title: Organization, A:Reference number: A35 A;Accession: A35938 A;Accession: A35938 A;Status: preliminary; A;Molecule type: DNA A;Residues: 1-2248 < GAN A;Cross-references: GB:	RESULT A35938 Profil C;Spec C:Date	4444443337333333 554444433376
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ragment) W.W.; Berr B6, 4848-46 cDNA clone ID:89296901 NID:918260	SCC Pre Pre SSGSF	OMIM:13 lulin-re polymor at at peat peat	0. 1-0 0	μ. Ω	T0001 T2751 S35752 A2471 S6306 T3754 T3754 T3754 T3966 T14016 T14016 T15502 T3967 T3967 T3109 T3109 T3109 T3109
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R; Bevan, M.; Vitale, D.; Liguori,
submitted to the Protein Sequence
A; Reference number: Z15404
A; Accession: T05221
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C;Superfamily: unassigned calmodulin-related proteins; calmodulin
C;Keywords: EF hand; epidermis; polymorphism; tandem repeat
E;49-81/Domain: calmodulin repeat homology <EF2>
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C;Species un
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A; Residues: 1-343 <BEV>
A; Cross-references: EMBL: AL031032
                                                                                                                                                                                                                                                                                                                hypothetical protein F1715.120 - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Datc: 23-Apr.1999 #sequence_revision 23-Apr.1999 #text_change 23-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GDB:119912; OMIM:135940
A;Map position: 1921-1921
C;Superfamily: unassigned calmodulin-relate
C;Keywords: EF hand; epidermis; polymorphis
                                                                                              A; Map position: 4
A; Note: F1715.120
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A; Residues: 1-591 <PRE>
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C;Date: 30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change 20-Sep-1999
C;Accession: A45135
R;Presland, R.B.; Haydock, P.V.; Fleckman, P.; Nirunsuksiri, W.; Dale, B.A.
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A;Gene: GDB:FLG
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hand; epidermis; polymorphism;
   Conservative
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Database, July 1998
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   Mismatches
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A; Reference number: I57820;
A; Accession: I77662
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A;Title: A cyclophilin-related protein involved in the function of natural 1 A;Reference number: A47328; MUID:93133824
A;Accession: B47328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        natural killer cell tumor-recognition protein - mouse
N;Alternate names: cyclophilin-related NK-tumor recognition protein; natural killer-t
C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1994 #sequence_revision 17-Jul-1994 #text_change 05-Nov-1999
C;Accession: B47328; 177662
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C;Species: Staphylococcus aureus
C;Date: 10-De______ *sequence_revision 10-Nov-1995 *text_change 18-Feb-2000
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                                                                                      C;Keywords: alternative splicing; lymphocyte F;60-230/Domain: cyclophilin homology <CYP>
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A;Molecule type: mRNA
A;Residues: 235-237;363-294 <RIN>
A;Cross-references: GB:S65998; NID:9425701; PIDN:AAB28500.1;
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A; Residues: 1-1507 < AND>
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C;Superfamily: penic
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A; Residues: 1-716 < MUR>
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FEMS Microbiol. Lett. 117, 131-136,
                                                                                                                                                                C; Genetics:
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A;Note: authors translated the codon AGT for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary
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39.3%;
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Pred. No. 3.1;
6; Mismatches
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C.Comment: This protein functions in RNA metabolism, and is involved in processing of processing of processing in the containing proteins; ribonucleoproteins; proteins; ribonucleoproteins; proteins; ribonucleoproteins; proteins; ribonucleoproteins; proteins; pro
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submitted to the EMBL Data Library, April 1996
A;Description: The sequence of C. elegans cosmid F21C10.
A;Reference number: Z20610
A;Accession: T29343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein F21C10.4 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
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N;Alternate names: E5.1 protein
C;Species: Homo sapiens (man)
C;Date: 08-Feb-1996 #sequence_revision 19-Apr-1996 #text_change 24-Sep-1999
C;Accession: JC4525
R;Badolato, J.; Gardiner, E.; Morrison, N.; Eisman, J.
Copo 166 322-22 1006
probable RNA helicase - N;Alternate names: prote
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Accession: T29343
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A; Residues: 1-305 < BAD>
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A;Title: Identification and characterisation of a A:Reference number: JC4525; MUID:96125212
A;Accession: JC4525
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: preliminary; translated from
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Best Local S
Matches 22
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Best Local :
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                                                                                                                                                                                                                          27
                                                                                                                                                                                                                                                                                          16 GRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS 49
                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                   GRGGGGRGSSGARSSSRSFSRSGGAGGGKFHSSS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   59/2; 106/2; 178/2
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protein DKFZp586A0419.1
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Pred. No. 0.77
3; Mismatches
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C:Species: Homo sapiens (m
C:Date: 11-Jun-1999 #seque
C:Accession: T08745; T1314
R:Wambutt, R.; Heubner, D.
submitted to the Protein S
A:Reference number: Z16471
A:Accession: T08745
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A;Molecule type: mRNA
A;Residues: 1-696, 'PSOSRRDWQSA' <SUK>
A;Cross:references: EMBL:AF083255; NID:g3435311; PID:g3435312; PIDN:AAC32396.1
C;Superfamily: ATP-dependent RNA helicase DBP1
C;Superfamily: ATP-dependent RNA helicase DBP1
C;Keywords: ATP: DEAD box; nucleotide binding; P-loop
F;178-185/Region: nucleotide-binding motif A (P-loop)
F;284-289/Region: nucleotide-binding motif B
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A;Description: A novel human cDNA homologous to RNA helicase genes A;Reference number: 217605
A;Accession: T13148
C;Species: Bombyx mori (silkworm)
C;Date: 19-May-1995 #sequence_revision 21-Jul-1995 #text_change 09-Sep-1997
C;Accession: S52714
R;Garel, A.A.; Deleage, G.G.; Prudhomme, J.J.
                                                                                                                  S52714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein W03G1.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C;Accession: T33997
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Best Local Similarity
Watches 21; Conserve
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A; Map position:
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A; Residues: 455-819 <WAM>
A; Cross-references: EMBL: AL050096; PIDN: CAB43268.1
A; Experimental source: adult uterus; clone DKFZp580
                                                                                           sericin1B -
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A; Residues: 1-471 <PAU>
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Date: 11-Jun-1999 #sequence_revision 18-Aug-2000 #text_change 19-Jan-2001
Accession: T08745; T13148
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                                                                                           silkworm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T33997
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34.1%;
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Pred. No. 3
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Mismatches
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A;Genetic code: SGC3
A,Start codon: GTG
C;Superfamily: glycine-rich cell wall structural
C;Keywords: surface antigen
F;1-29/Domain: signal sequence #status predicted
F;30-174/Product: variant surface protein vlpB #s
                                                                                                                                                          neutrophil protein - pig (fragment)
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 18-Jan-1991 #sequence_revision 18-Jan-1991 #text_change 05-Nov-1999
C:Accession: A35419
R:Bellavite, P.; Bazzoni, F.; Cassatella, M.A.; Hunter, K.J.; Bannister, J.V.
Blochem. Biophys. Res. Commun. 170, 915-922, 1990
A:Title: Isolation and characterization of a cDNA clone for a novel serine-1 A; Reference number: A35419; MUID:90343818
A; Accession: A35419
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C; Date:
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A35419
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A;Title: Molecular basis of Mycoplasma surface antigenic variation: a A;Reference number: S18651; MUID:92097525
A;Accession: S18654
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A;Description: Structure and organisation of the Bombyx mori sericin I gene and of the
A;Reference number: S52714
A;Accession: S52714
                                                                                   A;Molecule type: mRNĀ
A;Residues: 1-284 <BEL>
A;Cross-references: GB:M55701; NID:g164672;
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A; Residues: 1-1217 <GAR>
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A; Residues: 1-174 < YOG>
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                                                                                                                                          A; Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     variant surface antigen vlpB precursor - Mycoplasma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;Species: Mycoplasma hyorhinis;Date: 22-Nov-1993 #sequence_revision
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les 22; Conser
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   16;
                  Similarity
   Conservative
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                  27.48;
Score 69; DB 2
Pred. No. 1.8;
6; Mismatches
   6;
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Pred. No. 1.1;
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C;Accession: A34615

R;Haydock, P.V.; Dale, B.A.
DNA Cell Biol. 9, 251-261, 1990
A;Title: Filaggrin, an intermediate filament-associated A;Reference number: A34615; MUID:90274870
A;Accession: A34615
                                                                                                                                                                                                                                                                                      R;Resing, K.A.; Walsh, K.A.; Haugen-Scofield, J.; Dale, B.A. J. Biol. Chem. 264, 1837–1845, 1989
A;Title: Identification of proteolytic cleavage sites in the A;Reference number: A31488; MUID:89109207
A;Accession: A31488
                                                                                                                                                                                    C;Superfamily: unassigned calmodulin-related
C;Keywords: EF hand; epidermis
                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Mus musculus (house mouse)
C;Date: 20-Jul-1989 #sequence_revision 20-Jul-1989 #text_change 26-May-2000
C;Accession: A31488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: GB:M21759; NID:g204143; PIDN:AAA41161.1; PID:g204144 A;Note: the authors translated the codon GAA for residue 568 as Gln C;Superfamily: unassigned calmodulin-related proteins; calmodulin repeat homology C;Keywords: EF hand; epidermis
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 29-Jun-1990 #sequence_revision 09-Oct-1992 #text_change 04-Feb-2000
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VIT2_CHICK
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TRX_DROME
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MCKIDLEy-89296901; pubMed=2740331; MCKIDLey-Grant L.J., Idler W.W., Cannizzaro L., Croce C.M., Huebme ("Characterization of a cDNA clone localization of the gene to chron proc. Natl. Acad. Sci. U.S.A. 86: -: FUNCTION: AGGREGATES KERATIN DISULFIDE-BOND FORMATION OF W. TERMINAL DIFFERENTIATION OF W. HIGHLY PHOSPHORYLATED PRECURS OF 324 AA, WHICH ARE NOT SEEP PRECURSOR IS DEPOSITED AS KER DIFFERENTIATION IT IS DEPHOSE PRECURSOR IS INSTITUTED PRECURS OF 324 AA, WHICH ARE NOT SEEP PRECURSOR IS DEPOSITED AS KER DIFFERENTIATION IT IS DEPHOSE This SWISS-PROT entry is copyrigh between the Swiss Institute of E between the Swiss Institute of E the European Bioinformatics Institutions modified and this statement is no entities requires a license agree or send an email to license(sbs-s	T 1 FILA_HUMAN STANDARD; P P20330; 01-FEB-1991 (Rel. 17, Created) 01-FEB-1996 (Rel. 33, Last sequ 15-JUL-1999 (Rel. 38, Last anno FILAGGRIN PRECURSOR (FRAGMENT). HOMO Sapiens (Human). Eukaryota; Metazoa; Chordata; C Mammalia; Eutheria; Primates; C MCBI_TaxID-9606; [1] EQUENCE FROM N.A.	220 549 588 727 1 736 1 880 1 1581 1 345 1 345 1 345 1
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EVOCTION: MAY HAVE DUAL FUNCTIONS, ONE IN VEGETATIVE CELLS AT FUNCTION INVOLVING CELL-TYPE CHOICE AND A LATER FUNCTION INVOLVING PROGRESSION TO THE TIPPED MOUND STACE.

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LIPID
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                                                                                                                                           Saccharomyces cerevisiae (Baker's yeast).

Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           set of divergent genes undergo spontaneous mutation of periodic coding regions and 5' regulatory sequences."; EMBO J. 10:4069-4079(1991).
 SEQUENCE FROM N.A MEDLINE=94205265;
                                                                                               SEQUENCE FROM
                                                                                                                                                                                            SRP40 OR YKR092C OR YKR412A.
                                                                                                                                                                                                              SUPPRESSOR PROTEIN SRP40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -!- SUBCELLULAR LOCATION: ATTACHED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yogev D., Rosengarten R., Watson-Mckown R., Wise K.S.;
"Molecular basis of Mycoplasma surface antigenic variation: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=92097525; PubMed=1721868;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- FUNCTION: RESPONSIBLE FOR THE ANTIGENIC DIVERSITY FOR HOST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID-2100;
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MISCELLANEOUS: THE NUMBERS OF REPEATS CAN VARY AND IS ONE OF BASIS OF THE ANTIGENIC DIVERSITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 X62936; CAA44709.1; ALT_SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Membrane;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PS00013;
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                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                     27, Created)
29, Last sequence update)
36, Last annotation update)
   PubMed=8154186;
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43.18;
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7 X 12 AA TANDEM REPEATS.
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Pred. No. 0.5;
7; Mismatches
                                                EMBL/GenBank/DDBJ
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VARIANT SURFACE ANTIGEN B.
                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28F4C9ECA85585D7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Repeat; Signal.
                                                               Thuriaux
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                                                  databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 174;
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MGD; MGI
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                                                                                                             EMBL;
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r protein;
261
467
477
841
871
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Best Local Similarity
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088573;

20-AUG-2001 (Rel. 40, C

20-AUG-2001 (Rel. 40, I

20-AUG-2001 (Rel. 40, I
                                                                                                                                                                                                                                                                                 Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.-!- SUBCELLULAR LOCATION: NUCLEAR (POTENTIAL).-!- SIMILARITY: BELONGS TO THE AF4 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for no entities requires a license agreement.
                                                                                        entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; L11275; AAA35091.1; -.
EMBL; X73541; CAA51946.1; -.
EMBL; Z28317; CAA82171.1; -.
PIR; S38170; S38170.
SGD; S0001800; SRP40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      new open reading frames.";
reast 9:1349-1354(1993).
reast 9:1349-1354(1993).
reast 9:1349-1354(1993).
SUBUNIT AC40 OF DNA DEPENDANT RNA POLYMERASE I AND III.
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                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-Thymus;
                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse).
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                                                                                                                                      European Bioinformatics Institute. The by non-profit institutions as long ified and this statement is not removed.
                         MGI:1100819;
                                                AF074266; AAD08668.1;
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406 AA;
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Proto-oncogene
                         Mllt2h
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G -> N (IN REF. 1).
; 8EA007695AF4BAlD CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
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J.L.;
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SFR4_HUMAN
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01-FEB-1995
20-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-92249775; 84-89; 126-137; 140-154 AND 172-179. Zahler A.M., Lane W.S., Stolk J.A., Roth M.B.; "SR proteins: a conserved family of pre-mRNA splicing f Genes Dev. 6:837-847(1922).
                                                                                                                                                                                                                                                                             Pfam; PF00076; rrm; 2. SMART; SM00360; RRM; 2.
                                                                                                                                                                                                                                                                                                                                                                                                              use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entitles requires a license agreement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a between the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict the European Bioinformatics Institute.
                                                                                SEQUENCE
                                                                                                                                                                                                                                      PROSITE; PS50102; RRM; 2. PROSITE; PS00030; RRM_RNP_1;
                                                                                                                                                                                                                                                                                                                                                                                                    entities requires a license agreement or send an email to license@isb-sib.cl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zahler A.M., Neugebauer K.M., Stolk J. "Human SR proteins and isolation of a
                                                                                                                                                              DOMAIN
                                                                                                                                                                              Repeat; Phosphorylation.
DOMAIN 2 72
                                                                                                                                                                                                                 mRNA processing; mRNA splicing;
                                                                                                                                                                                                                                                                                                                      InterPro; IPR000504; RRM
                                                                                                                                                                                                                                                                                                                                          MIM; 601940;
                                                                                                                                                                                                                                                                                                                                                             EMBL; L14076; AAA36649.1;
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MEDLINE-93309435; PubMed-8321209;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FUNCTION: A PROBABLE ROLE IN ALTERNATIVE SPLICE SITE SELECTION DURING PRE-MRNA SPLICING. SUBCELLULAR LOCATION: NUCLEAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY:
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                                                                                                                                                                                                                                                                                                                                                                                                an email to license@isb-sib.ch).
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                                                                                ΑA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CONTAINS 2 RNA RECOGNITION MOTIFS BELONGS TO THE SR FAMILY OF SPLICE
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. 40, Last annotation update)
ARGININE/SERINE-RICH 4 (PRE-MRNA SPLICING FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13:4023-4028(1993).
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97
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N -> D (IN REF: 2)
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                                                                          -> D (IN REF. 2).
681315A9E951CF72
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67;
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ID VLPD_MYCHR S
AC Q49536; 005665;
DT 01-NOV-1997 (Rel
DT 15-DEC-1998 (Rel
DE VARIANT SURFACE
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CARBOHYD
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Mammalia; Eutheria;
Bovidae; Bovinae; E
NCBI_TaxID=9913;
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DMP1_BO
Q95120;
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                                                                                                                                                                                                                                                                                            CARBOHYD
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                                                                                                                                                                                                                                                                                                                     CHAIN
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                                                                                                                                                                                                                                                                                                                                                       EMBL; U47636; AAB09412.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       phosphoprotein gene.";
J. Dent. Res. 76:754-760(1997).
-i- FUNCTION: COULD BE INVOLVED IN
EXTRACELLULAR MATRIX AND IN DE
-i- TISSUE SPECIFICITY: EXPRESSED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=97263952; PubMed=9109824;
Hirst K.L., Ibaraki-O'Connor K., Young M.F., Di
"Cloning and expression analysis of the bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bos taurus (Bovine).
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
DENTIN MATRIX ACIDIC PHOSPHOPROTEIN 1 PRECURSOR (DENTIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FISSUE-Tooth
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16; Conserv
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  SURFACE
                                                                                                                                                                                                                                                                                                                                                                                      non-profit institutions as long as its content is in no way and this statement is not removed. Usage by and for commercial requires a license agreement (See http://www.isb-sib.ch/announce/
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510
(Rel. 35, Created)
(Rel. 35, Last sequence update)
(Rel. 37, Last annotation updat)
FACE ANTIGEN D PRECURSOR (VLPD P
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                                                                                                                                                                                                                                                                                                                                           Signal
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PRECURSOR (VLPD PROLIPOPROTEIN).
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N-LINKED (GLORAC...) (POTENTIAL).
N-LINKED (GLORAC...) (POTENTIAL).
N-LINKED (GLORAC...) (POTENTIAL).
N-LINKED (GLORAC...) (POTENTIAL).
CELL ATTACHMENT SITE (POTENTIAL).
749: 9BFA9A74F6450865 CRC64;
                                                                                                                                                                           Score 67; DB
Pred. No. 2.6;
ll; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9;
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BUT NOT IN AMELOBLAST.
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                                              NRG2_RAT STANDARD; PRT; 868 AA.
035569; 035570; 035571; 035572; 035073;
115-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
PRO-NEUREGULIN-2 PRECURSOR (PRO-NRG2) [CONTAINS: NEUREGULIN-2 (NEURAL-AND THYMUS-DERIVED ACTIVATOR FOR ERBB KINASES) (NTAK)]
                                                                                                                                                                                                                                                                                                                      DOMAIN
REPEAT
REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                       use by non-profit institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
Eukaryota; Metazoa; Mammalia; Eutheria; NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mycoplasma hyorhinis.
Bacteria; Firmicutes; Bacillus/Clostridium group; Mollicutes;
Mycoplasmataceae; Mycoplasma.
                                                                                                                                                                                                                                                                                                                                                                                                            Antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Watson-Mckown
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hyorhinis.";
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                               Rattus norvegicus (Rat)
                                            NRG2 OR NTAK.
                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yogev D., Watson-Mckown R., Rosengarten R., Im J., Wise K.S.;
"Increased structural and combinatorial diversity in an extended
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-96032402;
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                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                     PROKAR_LIPOPROTEIN;
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           Chordata;
Rodentia;
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Pred. No. 0.
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N-ACYL DIGLYCERIDE (PROBABLE).
7 X 12 AA TANDEM REPEATS.
                                                                                                                                                                                                                                                                                                                                                                                                PROBABLE.
          Craniata; Vertebrata;
Sciurognathi; Muridae
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                                                                                                                                                                                                                                                                           B8E1870F60ABFD5E CRC64;
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           Muridae;
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                                                                                                                                                                                                                     Indels
                     Euteleostomi;
           Murinae;
                                                                                                                                                                                                                     13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a collaboration
                                                              (NRG-2)
                                                                                                                                                                                                                     Gaps
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EMBL; EMBL; EMBL; EMBL;

InterPro;

InterPro;

IPR000561; IPR003006;

Ig_MHC. Ig_c2.

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This
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MEDLINE-97311397; PubMed-9168114;
Chang H., Riese D.J. II, Gilbert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [1]
SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                      entities re
or send an
                                                                                                                                                                                                                                                                                                                                                                                                the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ÷
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=98000524; rushuc sii.
Higashiyama S., Horikawa M., Yamada K., J
                                                                                                                                                                                                                                                                                                                                                                                                                                       between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <del>-</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "A novel brain-derived member of the ethat interacts with ErbB3 and ErbB4.";
J. Biochem. 122:675-680(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nature 387:509-512(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nakagawa T., Miyagawa
Ishiguro H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=98006324; PubMed=9348101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ligands
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EXTERNAL FACE LEADS TO THE RELEASE OF THE SOLI FORM (BY SIMILARITY).

PTM: EXTENSIVE GLYCOSYLATION PRECEDES THE PROSIMILARITY).

SIMILARITY: CONTAINS 1 EGF-LIKE DOMAIN.

SIMILARITY: CONTAINS 1 IMMUNOGLOBULIN-LIKE C2: SIMILARITY: CONTAINS 1 THE NEUREGULIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DOMAIN.
TISSUE SPECIFICITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A PROTEOLYTICALLY RELEASED SOLUBLE GROWTH FACTOR FORM. THE MEMBRANE-BOUND FORM DOES NOT SEEM TO BE ACTIVE (BY SIMILARITY). ALTERNATIVE PRODUCTS: AT LEAST 7 ISOFORMS; NTAK-ALPHA1 (SHOWN HERE), NTAK-ALPHA2A, NTAK-ALPHA2B/NTAK-ALPHA2-1P, NTAK-BETA, NTAK-BE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: DIRECT LIGAND FOR ERBB3 AND ERBB4 TYROSIN RECEPTORS. CONCOMITANTLY RECRUITS ERBB1 AND ERBB2 C RESULTING IN LIGAND-STIMULATED TYROSINE PHOSPHORYLA ACTIVATION OF THE ERBB RECEPTORS. MAY ALSO PROMOTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOMAIN (BY SIMILARITY).
PTM: PROTEOLYTIC CLEAVAGE CLOSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DIMERIZATION (BY SIMILARITY).
DOMAIN: ERBB RECEPTOR BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN: THE CYTOPLASMIC DOMAIN MAY BE INVOLVED IN THE OF TRAFFICKING AND PROTEOLYTIC PROCESSING. REGULATION PROTEOLYTIC PROCESSING INVOLVES INITIAL INTRACELLULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEVELOPMENTAL STAGE: IN THE EMBRYO, EXPRESSED IN THE BRAIN OF E11.5 EMBRYOS WHERE IT IS FOUND IN THE TELENCEPHALON, BUT NOT THE HINDBRAIN. NOT FOUND IN THE HEART. IN THE ADULT, FOUND IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE SPECIFICITY: EXPRESSED IN MOST PARTS OF THE BRAIN, ESPECIALLY THE OLFACTORY BULB AND CREBBELLUM WHERE IT LOCALIZES IN GRANULE AND PURKINJE CELLS, IN THE HIPPOCAMPUS, FOUND IN THE GRANULE CELLS OF THE DENTRATE GYRUS. IN THE BASAL FOREBRAIN, FOUND IN THE CHLINERGIC CELLS. IN THE HINDBRAIN, WEAKLY DETECTABLE IN THE MOTOR TRIGEMINAL NUCLEUS. NOT DETECTED IN THE HYPOTHALAMUS. ALSO FOUND IN THE LIVER AND IN THE THYMUS. NOT DETECTED IN HEART,
; D89995; BAA23344.1; -.
; D89996; BAA23345.1; -.
; D89997; BAA23346.1; -.
; D89998; BAA23347.1; -.
; AB001576; BAA23348.1; -.
; TPTC); IPR000561; EGF-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPLICING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HETERODIMERIZATION WITH THE EGF RECEPTOR. SUBCELLULAR LOCATION: EXISTS AS AN TYPE I MEMBRANE PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BRAIN AND THYMUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADRENAL GLAND,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SWISS-PROT entry is copyright. It is produced through
                                                                                                                                                                                                                                                      requires a license agreement (san email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                the Swiss Institute of Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for ErbB-family receptors en
                                                                                                                                                                                                                                                                                                                           and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                               non-profit institutions as long
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THE ALPHA-TYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OR TESTIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 128-162,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AND BETA-TYPE DIFFER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISOFORMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLOSE TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         _{\rm SI}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1., Stern
encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ELICITED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             epidermal growth
                                                                                                                                                                                                                                                                                   (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THE PLASMA MEMBRANE OF THE SOLUBLE GROWT
                                                                                                                                                                                                                                                                                                                                                        There are no restrictions ong as its content is in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NRG2-ALPHA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nagatsu
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B1 AND ERBB2 CORECEPTO
NE PHOSPHORYLATION AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D.F.,
                                                                                                                                                                                                                                                                                                                       Usage
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C2-TYPE DOMAIN
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neuregulin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Τ.
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                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL outstation
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OF THE
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Best Local S
Matches 15
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SERI OR SER-1.
                                                                                                                                                                                                                     GALME
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CONFLICT
CONFLICT
SEQUENCE
  Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Di Pyraloidea; Pyralidae; Galleriinae; Galleria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMART; SM00181; EGF; 1.
SMART; SM00408; IGC2; 1.
PROSITE; PS00022; EGF_1; 1.
PROSITE; PS01186; EGF_2; 1.
Growth factor; EGF-11ke domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR002154; Neureg
Pfam; PF00008; EGF; 1.
Pfam; PF00047; ig; 1.
Pfam; PF02158; Neuregulin;
                                                         Galleria mellonella (Wax moth)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VARSPLIC
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117
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    Last sequence update)
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117
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93776
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                                                                                                 PROTEIN 1)
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                                                                                                                                                          Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NGFFGORCLEKLPLILYMDDPKOKHLGFELKE -> VGYTG
DRCODFAMVNESK (IN ISOFORM NTAK-BETA).
MISSING (IN ISOFORM NTAK-ALPHA2A AND
ISOFORM NTAK ALPHA2B).
HLGFELKEAEELYQKRVLTITGICVA -> SVLWDTPGTGV
SSGWSTSPSTLDLN (IN ISOFORM NRG2-ALPHA).
MISSING (IN ISOFORM NRG2-ALPHA).
S -> F (IN REF. 2).
S -> H (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                            7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-LINKED (GLCNAC. . .) (POTENTIAL).
N-LINKED (GLCNAC. . . ) (POTENTIAL).
MISSING (IN ISOFORM NRG2-BETA).
PLV -> FFF (IN ISOFORM NTAK-ALPHA2-1P).
C -> G (IN ISOFORM NTAK-GAMMA).
MISSING (IN ISOFORM NTAK-GAMMA).
NGFFGQNCLEKLPLRLYMPDPKQ -> VGYTGDRCQQFAMV
NRS (IN ISOFORM NRG2-BETA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POLY-PRO.
BY SIMILA
BY SIMILA
BY SIMILA
BY SIMILA
N-LINKED
N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                Score 66; I
Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INTERNAL SIGNAL SEQUENCE CYTOPLASMIC (POTENTIAL). IG-LIKE C2-TYPE DOMAIN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRO-NEUREGULIN-2,
                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -LINKED (GLCNAC. . .) (POTENTIAL).
-SESING (IN ISOFORM NRG2-BETA).
-> G (IN ISOFORM NTAK-GAMMA).
                                                                                                   (FRAGMENT).
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Y SIMILARITY.
Y SIMILARITY.
Y SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alternative
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                                                                                                                    update)
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80
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                                                                                                                                                                                                                                                                                                                                                                                                                   Length 868;
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                      Glossata; Ditrysia;
                                                                                                                                                                                                                                                                                                                                                                            Indels
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TOP1_DROME
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Best Local Similarity 40.8
---- 20; Conservative
                                                                                                                                                                                                                                                                                                       TOP1_DROME STANDARI
P30189; Q9VXW6;
01-APR-1993 (Rel. 25, C
01-APR-1993 (Rel. 25, I
20-AUG-2001 (Rel. 40, I
DNA TOPOISOMERASE I (EC
                                                                                                                                          SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDLINE=93117086; PubMed=1335568;

Hsieh T.-S., Brown S.D., Huang P., Fostel

"Isolation and characterization of a gene
I in Drosophila melanogaster."

I in Drosophila Res. 20:6177-6182(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=BERKELEY;
MEDLINE=20196006;
                                                      early embryonic development
furrows ";
J. Cell Biol. 134:923-934(19)
                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                       Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                        Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
                                                                                                                                                                                                                                                                                                TOP1 OR CG6146.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF01391; Collagen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the European Bioinformatics Institute. The use by non-profit institutions as long a modified and this statement is not removed.
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                                 SEQUENCE FROM N.A.
                                                                                       Zhang C.X., Lee M.P., Chen A.D., "Isolation and characterization
                                                                                                              MEDLINE=96354910;
                                                                                                                           STRAIN=OREGON-R;
                                                                                                                                                                                                                                                              Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                          53
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                                                                                                                                                                                                                                                                                                                                                                                                                          SSGSSGS--SGSSGSSGSSGSSGSSGSSSSSSSSSGSGS-SSGS
                                                      Biol. 134:923-934(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IPR000087; Collagen.
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                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
         PubMed=10731132;
                                                                                                            PubMed=8769417;
                                                                                                                                                                                                                                                                                                        5, Last sequence update)
0, Last annotation updat
(EC 5.99.1.2).
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40.8%;
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                                                                             , Brown S.D., Hsieh T.-S.; of a Drosophila gene esse formation of cortical cle
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encoding
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S.E.,

Holt

R.A.,

Evans

C.A.,

Gocayne

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RA Ballew R. M., Basu A., An H.-J., Andrews-Frannkoch C., Baldwin D.,
RA Ballew R. M., Basu A., An H.-J., Andrews-Frannkoch C., Basuly E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottler P.,
RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
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RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Cary R.S., Gelbart W.M., Glasser K.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.L.,
RA Menklov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Munt S.M., Pittman G.S., Pan S., Pollard J., Puri V., Resse M.G.,
RA Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Resse M.G.,
RA Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J.,
RA Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J.,
RA Wang S.H., Zhong H.N., Robin G.M., Venter E., Wang A.H., Wang Y.,
RA Zheng Y.H., Zhong W., Rubin G.M., Venter J.C.,
RT The genome sequence of Drosophila melanogaster.",
CC -1-Full Grow R. S., Schan M., Zhang S., Zhao Q., Zhang L.,
CC -1-Full Grow R. S., Schan M., Zhang S., Zhan S., Smith H.O.,
CC -1 Full Grow R. S., Schan M., Zhang S., Zhan S., Smith H.O.,
CC -1 Full Grow R. S., Sc
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                                                                                                                                                                                                                       EMBL; U80064; AAC24158.1; -.
EMBL; AE003498; AAF48440.1; -.
PIR; S35521.
PIR; S35521,
HSSP; P11387; 1A35.
FlyBase; FBgn0004924; Top1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                               PRINTS;
                                                                                                                                                                      InterPro; IPR001631; Topismerse_I.
Pfam; PF01028; Topoisomerase_I; 1.
                                                                                                                                                                                                                                                                                                                                                                                                entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                 use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an
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                                                                          Isomerase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FUNCTION: THE REACTION CATALYZED BY TOPOISOMERASES LEADS TO CONVERSION OF ONE TOPOLOGICAL ISOMER OF DNA TO ANOTHER.

CATALYTIC ACTIVITY: ATP-INDEPENDENT BREAKAGE OF SINGLE-STRANI DNA, FOLLOWED BY PASSAGE AND REJOINING.

DNA, FOLLOWED BY PASSAGE AND REJOINING.

DNA, FOLLOWED BY EASTAGE AND REJOINING.

NISCELLANEOUS: EUKARYOTIC TOPOISOMERASE I AND II CAN RELAX BO NECATIVE AND POSITIVE SUPERCOILS, WHEREAS PROKARYOTIC ENZYMER RELAX ONLY NECATIVE SUPERCOILS, WHEREAS PROKARYOTIC BREAKS A DNA BACKBONE BOND, IT SIMULTANEOUSLY FORMS A PROTEIN-DNA LINK, II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY: BELONGS TO THE EUKARYOTIC TYPE I TOPOISOMERASE FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WHICH A TYROSYL OXYGEN IN THE ENZYME IS JOINED TO AT ONE END OF THE ENZYME-SEVERED DNA STRAND.
                                                                                                                                                                                                                                                                                                                                                  M74557; AAA28951.1; -.
                                                                                                                        SM00435; TOPEUC;
                                                                                                                                               PR00416;
                                                                                                    PS00176;
; Topoisomerase;
32 39
40 198
930 930
EUTPISMRASEI.
  CLEAVAGE
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  (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                               Usage
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RESULT
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CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                             de Antoni A., D Angelo M., Dal Pero F., Sartorello Pallavicini A., Lanfranchi G., Valle G.; "The DNA sequence of cosmid 14-13b from chromosome Saccharomyces cerevisiae reveals an unusually high overlapping open reading frames."; yeast 13:261-266(1997).
                                                                                                                                                   EMBL; Z69382; CAA93381.1;
EMBL; Z71400; CAA96005.1;
SGD; S0005068; YNL124W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-OCT-1996 (Rel. 34,
15-JUL-1998 (Rel. 36,
HYPOTHETICAL 54.9 KDA
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01-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                          Hypothetical protein.
SEQUENCE 492 AA; 54949
                                                                                                                                                                                                       entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                    the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for commodified and this statement is not removed.
                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                      adenosine deaminase gene and
Yeast 11:1195–1209(1995).
                                                                                                                                                                                                                                                                                                                                                   "A 43.5 kb segment of yeast chromosome XIV, which contains MFA2, MEP2, CAP/SRV2, NAM9, FKB1/FPR1/RBP1, MOM22 and CPT1, predicts a adenosine deaminase gene and 14 new open reading frames.";
                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=96109932; PubMed=8619318;
                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-S288C;
                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 1-50 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Fungi; l
Saccharomycetales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Saccharomyces cerevisiae (Baker's yeast).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE-97245296; PubMed-9090055;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=4932;
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50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 STGH-SGSQHSHTTTQGRSDASRGSSGSR----STSRETRDQEQ---SGDGSRHSGS 49
                        1 STG-HSGSQHSHTTTQGRSDASRGSSGSR--STSRETRDQEQSGD
                                                                                                                                                                                                                                                                                                                       SIMILARITY: TO S.POMBE SPBC30D10.15.
STGLGSGSSESESDSGSDSDSDSGSSGSEDDSADQDVEGEDEGGD
                                                  17; Conservative
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972 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetaceae; Saccharomyces.
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46
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Last annotation update)
PROTEIN IN SPC98-TOM70
                                                                                                                        MW;
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                                                    Score 64.5; DI
Pred. No. 4.6;
8; Mismatches
                                                     8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -> H (IN REF. 3).
-> SSS (IN REF. 3).
-> Q (IN REF. 3).
3764B8BDEEFA30CD CRC64;
                                                                                                                          5A496278070F6255 CRC64;
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                                                                                DB 1;
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number of
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Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
Schizosaccharomycetales; Schizosaccharomycetaceae;
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ITERMINAL DIFFERENTIATION OF MAMMALIAN EPIDERMIS. INSOLUBLE, PTM: FILAGGRIN IS INSTITUTED RECURSOR CONTAINING MANY TANNEM COPIES OF 248 AA, WHICH ARE NOT SEPARATED BY "LARGE LINKER". THE PRECURSOR IS DEPOSITED AS KERATOHYALIN GRANULES. DURING TERMINAL PRECURSOR OF THE PROPERTY OF TH
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                    Score 252; DB 4;
Pred. No. 1.1e-22;
; Mismatches 0;
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                                                                                                   A8396F10F6A91991 CRC64;
                                                                                                                                                                                                                                                                                                    Markova
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                                                                                                                                                                                      of the human prof
                                                                                                                                                                                                                                                                                       N., Steinert P.M.; of the human profilaggrin
                                                             Length 990;
                                       Indels
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                                       0
                                     Gaps
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Q91708

xenopus

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316

STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS

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Best Local S
Matches 49
                                                           01-NOV-1996
01-NOV-1996
01-JUN-2001
                                                                                            Q16824
Q16824;
                                                                                                                                                                                                                                                                CA_BIND
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                             Pfam; PF00036; efhand; 1.
Pfam; PF01023; S_100; 1.
PRINTS; PR00487; FILAGGRIN.
PROSITE; PS00018; EF_HAND; UNKNOWN 1.
PROSITE; PS00303; S100_CABP; 1.
               Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR003303;
InterPro; IPR001751;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Profilaggrin is a major epidermal calcium-binding protein.";
Mol. Cell. Biol. 13:613-625(1993).
-i- FUNCTION: AGGREGATES KERATIN INTERMEDIATE FILAMENTS AND PROMOTES
DISULFID-BOND FORMATION AMONGST THE INTERMEDIATE FILAMENTS DURING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1996 (TrEMBLrel. 01, 01-NOV-1996 (TrEMBLrel. 01, 01-JUN-2001 (TrEMBLrel. 17,
     Mammalia;
                                                 FILAGGRIN PRECURSOR (FRAGMENT).
                                                                                                                                                                                                                                                                                                            Polymorphism
                                                                                                                                                                                                                                                                                                                      Phosphorylation;
                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR002048;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Steinert P.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Markova
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILAGGRIN (PROFILAGGRIN) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q05331
                            Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=93109348; PubMed=8417356;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       005331;
                                                                                                                                                               538
                                                                                                                                                             PTM: FILAGGRIN IS INITIALLY SYNTHESIZED AS A LARGE, INSOLUBLE, HIGHLY PHOSPHORYLATED PRECURSOR CONTAINING MANY TANDEM COPIES 324 AA. THE PRECURSOR IS DEPOSITED AS KERATOHYALIN GRANULES. DURING TERMINAL DIFFERENTIATION IT IS DEPHOSPHORYLATED & PROTEOLYTICALLY CLEAVED.
                                                                                                                              w
                                                                                                                                                                                                                                                                                                                                                                                                                                                         POLYMORPHISM: A NUMBER OF PROFILAGGRIN ISOFORMS WHICH DIFFER BOTH IN SEQUENCE AND IN THE NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TERMINAL DIFFERENTIATION OF MAMMALIAN EPIDERMIS
                                                                                                                                                                                                                                                                                                                                                                                                                         P02638; 1CFP.
                                                                                                                                                                                                                                                                                                                                                                                                                                   M96943; AAA36487.1;
                                                                                                                                                                                                           l Similarity
49; Conser
    ; Metazoa;
Eutheria;
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                                                           6 (TrEMBLrel.
6 (TrEMBLrel.
1 (TrEMBLrel.
                                                                                                                                                                                                                                                                  19
62
1218
1218
                                                                                                       PRELIMINARY;
                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                  <u>Α</u>,
                                                                                                                                                                                                                                                                          32
73
1218
                                                                                                                                                                                                                                                                                                                    Polyprotein; Developmental protein; Calcium-binding
   Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                     ; EF-hand.
; Filaggrin.
; S100_CaBP.
                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                133604 MW;
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17,
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Last sequ
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                                                                                                                                                                                                                                                                                    SITE
                                                                                                                                                                                                      Score 252; DB 4;
Pred. No. 1.4e-22;
   Craniata; Vertebrata; I Catarrhini; Hominidae;
                                                                                                       PRT;
                                                           annotation
                                                                      sequence
                                                                                                                                                                                                                                                               EC195AD5285B19C2 CRC64;
                                                                                                                                                                                                                                                                                    I (BY SIMILARITY).
II (BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C.C., Gan S.-Q.,
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                                                                                                                                                                                                                                                                                    (BY SIMILARITY).
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on update)
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                                                          update)
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               Euteleostomi;
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OF FILAGGRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Idler W.W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Euteleostomi;
; Homo.
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Best Local S
Matches 41
                                                                Query Match
Best Local
                                                     Matches
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Q01212; Q03840;
Q01212; Q03840;
Q1-NOV-1996 (TEMBLTel. 01, C:
Q1-NOV-1996 (TEMBLTel. 01, L:
Q1-JUN-2001 (TEMBLTel. 17, L:
FILAGGRIN (FRAGMENT).
                                                                                                                     Intermediate filament NON_TER 1 SEQUENCE 1084 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro;
PRINTS; PI
                                                                                                                                                                          InterPro; IPR003 PRINTS; PR00487;
                                                                                                                                                                                                     EMBL; M60503; AAA63243.1; -.
EMBL; M60501; AAA63243.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                   gene
                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=PLACENTA;
MEDLINE=91064347; PubMed=2248957;
Gan S.Q., McBride W.O., Idler W.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (Human)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
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                                                                                                                                                                                                                                                                                                                                                      Biochemistry 29:9432-9440(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NON_TER
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                                                                                                                                                                                                                                                                                                                                                                                Organization, structure, and polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Organization, structure, and polymorphisms
 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         193
                          \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (PROBABLY FLYQVST). THE PRECURSOR IS DEF
GRANULES. BY MEANS OF DEPHOSPHORYLATION
FILAGGRIN IS FORMED.
                                                                                                                                                                                                                                                                      INSOLUBLE, HIGHLY PHOSPHORYLATED PRECURSOR CONTAINING MANY TANDEM COPIES OF 317 AA, WHICH ARE SEPARATED BY A SHORT LINKER SEQUENCE
                                                                                                                                                                                                                                                                                                 FUNCTION: FILAGGRIN AGGREGATES KERATIN INTERMEDIATE FILAMENTS AND PROMOTES DISULFID-BOND FORMATION ANONGST THE INTERMEDIATE FILAMENTS DURING TERMINAL DIFFERENTIATION OF MAMMALIAN EPIDERMIS. MISCELLANEOUS: FILAGGRIN IS INITIALLY SYNTHESIZED AS A LARGE,
              STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSGS 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SGHSGSHHSHTTSQGRSDASRGQSGSRSASRQTHDQEQSGDGSRHSGS
STGHSGSHHSHTTSQGRSDASHGTSGSRSASRETHNEEQSGDGSRHSGS
                                                  Similarity 83.7
41; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         o; IPR003303; Filaggrin.
PR00487; FILAGGRIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                        IPR003303; Filaggrin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               797 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA63248
                                                                                                                                                               Polyprotein; Developmental protein; Keratin;
                                                                                                                                                                             FILAGGRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PubMed=2248957;
O.W., Idler W.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               85176 MW;
                                                                86.1%;
83.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86.5%;
                                                                                                                      115271 MW;
                                                                                                                                                                                                                                                            THE PRECURSOR IS DEPOSITED AS KERATOHYALIN
                                                    Score 217; DE Pred. No. 2.26
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
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                                                                                                                       80C4640B8D5A362D CRC64
                                                               217;
No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        218; DB 4;
No. 1.3e-18;
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orphisms of
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                                                                DB 4;
2.2e-18;
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of the human profilaggrin
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                                                                             Length 1084;
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                                                     Indels
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 201
                                                                                                                                                                                                                                                                                                                                                                                 profilaggrin
                                                     0;
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Best Local S
Matches 4(
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                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
FILAGGRIN (PROFILAGGRIN) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q03838;
Q03838;
             EMBL;
                                                                                                                                                                                        MEDLINE-91255199; PubMed-2043621;
Gan S.-Q., McBride O.W., Idler W.W., Markova N., Steinert P.M.;
"Organization, structure, and polymorphisms of the human profil
                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (OCT-2000) to the EMB
EMBL; AL356504; CAC13171.1; .
Interpro; IPR003303; Filaggrin.
PRINTS; PR00487; FILAGGRIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
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Homo sapiens (Human).
Metazoa; Chordata;
                                                                                                                                                                  Biochemistry 30:5814-5814(1991).
                                                                                                                                                                                 gene."
                                                                                                                                                                                                                                                         Biochemistry 29:9432-9440(1990).
                                                                                                                                                                                                                                                                      gene
                                                                                                                                                                                                                                                                                                          MEDLINE-91064347;
                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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  InterPro;
                                                                                                                                                                                                                                   REVISIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                "Organization, structure,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     518
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                                                                                                   FUNCTION: FILAGGRIN AGGREGATES KERATIN INTERMEDIATE FILAMENTS PROMOTES DISULFID-BOND FORMATION AMONGST THE INTERMEDIATE FILAMENTS DURING TERMINAL DIFFERENTIATION OF MAMMALIAN EPIDERN POLYMORPHISM: A NUMBER OF PROFILAGGRIN ISOFORMS HAVE BEEN FOUN WHICH DIFFER BOTH IN SEQUENCE AND IN THE NUMBER OF FILAGGRIN
           MISCELLANEOUS: FILAGGRIN IS INITIALLY SYNTHESIZED AS A LARGE, INSOLUBLE, HIGHLY PHOSPHORYLATED PRECURSOR CONTAINING MANY TANDEM COPIES OF 324 AA. THE PRECURSOR IS DEPOSITED AS KERATOHYALIN GRANULES. DURING TERMINAL DIFFERENTIATION IT IS DEPHOSPHORYLATED PROTEOLYTICALLY CLEAVED.

L; M60499; AAA63246.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                              McBride
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    798 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                              PubMed=2248957;
le O.W., Idler W.W., Markov
ructure, and polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84773 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84.5%;
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Last sequence update)
Last annotation update)
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Pred. No. 5.26
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                END) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                       Craniata; Vo
Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
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                                                                                                                                                                                                                                                                                Markova N., Si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       465
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                                                                                                                                                                                                                                                                                                                                                                                     Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 4;
.2e-18;
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                                                                                                                                                                                                                                                                                Steinert P.M.;
he human profil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                    HAVE BEEN FOUND OF FILAGGRIN
                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             49
                                                                                                                                                                                                                                                                                profilaggrin
                                                                                                                                                                                          profilaggrin
                                                                                                                            EPIDERMIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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Best Local S
Matches 39
               Polymorphism.
PROPEP
CHAIN 29
PROPEP 46
CHAIN 47
CA_BIND 1
CA_BIND 6
NO_TER 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS;
NON_TER
NON_TER
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J. Biol. Chem. 267:23772-23781(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-PLACENTA;
MEDLINE-93054736; PubMed-1429717;
Presland R.B., Haydock P.V., Fleckman P., Nirunsuksiri W., Dale B.A.
"Characterization of the human epidermal profilaggrin gene. Genomic
"Characterization of the human of an S-100-like calcium binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1996 (TrEMBLrel. 01-JUN-2001 (TrEMBLrel.
    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1996
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                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; L01089;
EMBL; L01090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILAGGRIN
                                                                                                                                                                                                                                      Pfam; PF00036; efhand; 1.
Pfam; PF01023; S_100; 1.
PRINTS; PR00487; FILAGGRIN.
                                                                                                                                                                                                                                                                                                    InterPro; IPR002048; EF-hand.
InterPro; IPR003303; Filaggrin
InterPro; IPR001751; S100_CaBP
                                                                                                                                                                                                                                                                                                                                                                       MIM; 135940;
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                                                                                                                                                                                                PROSITE;
                                                                                                                                                                                                                  PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           317 TGHSGSHHSHTTSQGRSDASHGTSGSRSASRQTRNEEQSGDGTRHSGS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: AGGREGATES KERATIN INTERMEDIATE FILAMENTS AND PROMOT DISULFID-BOND FORMATION AMONGST THE INTERMEDIATE FILAMENTS DUR TERMINAL DIFFERENTIATION OF MANMALIAN EPIDERMIS.

TERMINAL DIFFERENTIATION OF MANMALIAN EPIDERMIS.

PTM: FILAGGRIN IS INITIALLY SYNTHESIZED AS A LARGE, INSOLUBLE, HIGHLY PHOSPHORYLATED PRECURSOR CONTAINING MANY TANDEM COPIES 324 AA. THE PRECURSOR IS DEPOSTTED AS KERATOHYALLN GRANULES. DURING TERMINAL DIFFERENTIATION IT IS DEPOSPHORYLATED PROTECLYTICALLY CLEAVED.

PROTEDLYTICALLY CLEAVED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      REPEATS
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39; Conserv
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                                                                                                                                                                                                PS00303;
                                                                                                                                                                                                                    PS00018;
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465 AA;
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Metazoa; Chordata; C
Metazoa; Primates; (
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AAA60176.1;
                                                                                                                                                                                            EF_HAND; UNKNOWN_1.
S100_CABP; 1.
                                              293
467
474
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Last annotation update)
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                                            POTENTIAL.
FILAGGRIN.
SITE I (BY
SITE II (BY
                                                                                                                            POTENTIAL.
FILAGGRIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 212; DB 4;
Pred. No. 4.1e-18;
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Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROFILAGGRIN ISOFORMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C883744C5E134097 CRC64;
    381491625C75E369
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                                                                SIMILARITY)
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i; Hominidae; Homo.
                                            SIMILARITY).
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    CRC64;
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Query Match Best Local

Similarity

82 79

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Score Pred.

207; DB 4; No. 2.1e-17;

Length

Indels

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Gaps

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118 49

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PRESULT O75370 ID TO 75370 ID 
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Best Local S
Matches 38
     Query Match
Best Local Similarity
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                                                                                                                                                                                              SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
Arrand M., Girbal-Neuhauser E., Jo
Submitted (JAN-1998) to the EMBL/(
EMBL, AF043380; AAC2359.1;
InterPro; IPR003303; Filaggrin.
PRINTS; PR00487; FILAGGRIN.
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SPECIFICALLY TO S-100/CABP LIKE PROTEINS.
EMBL; AL356504; CAC13172.1; -.
Interpro; IPR002048; EF-hand.
Interpro; IPR003303; Filaggrin.
Interpro; IPR001751; S100_CaBP.
Pfam; PF01023; S-100; 1.
PRINTS; PR00487; FILAGGRIN.
SMART; SM00054; EFD; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O75370 PRELIMINARY; PRT, O75370; O75370; O75370; O1-NOV-1998 (TrEMBLrel. 08, Last; O1-JUN-2001 (TrEMBLrel. 17, Last; EPIDERMAL FILAGGRIN (FRAGMENT).
                                                                                                                                                                                   InterPro; recorder; F
                                                                                                                        NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID-9606;
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01-MAR-2001 (TrEMBLrel. 16,
01-JUN-2001 (TrEMBLrel. 17,
01-JUN-101 (PROFILAGGRIN 5'
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01-MAR-2001
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NON_TER 687 687
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Mammalia; Eutheria; Primates;
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38; Conserv
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79.2%;
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R EF-HAND CALCIUM BINDING PROTEINS,
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EMBL/GenBank/DDBJ databases
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Last annotation update)
END) (FRAGMENT).
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Pred.
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annotation update)
        197;
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2e-16;
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                                                                                                                        CRC64;
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Q9R744;
01-MAY-2000
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Q53724;
01-NOV-1996
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01-JUN-2001
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Paint mutations in Staphylococcus aureus PBP 2 gene affect
penicillin-binding kinetics and are associated with resistance.";
Antimicrob. Agents Chemother. 39:103-106(1995).
EMBL; 125426; AAA74375.1;
InterPro; IPR001264; Transglycosyl.
InterPro; IPR001264; Transglycosyl.
InterPro; IPR001460; Transpeptidse.
Pfam; PF00915; Transglycosyl; 1.
ProDom; PP001895; Transglycosyl; 1.
ProDom; PD001895; Transglycosyl; 1.
ProDom; PD01895; Transglycosyl; 1.
ProDom; PR001895; Transglycosyl; 1.
Pinho M.G., Wu S., Ludovice A.M., Filipe S.R., Submitted (JAN-1999) to the EMBL/GenBank/DDBJ EMBL; Y17795; CAA76853.1;
                                                                                  SEQUENCE FROM N.A.
STRAIN=RUSA130;
                                                                                                                                                                                                 Pinho M.G., de Lencastre H., Tomasz A.; "Transcriptional analysis of the Staphylococcus binding protein 2.";
                                                                                                                                                                                                                                                                                         STRAIN=COL, AND RUSA130;
MEDLINE=99047551; PubMed
                                                                                                                                                                                                                                                                                                                                                                                                   Bacteria; Firmicutes; Bacillus/Clostridium group; Bacillus/Staphylococcus group; Staphylococcus. NCBI_TaxID=1280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Staphylococcus aureus
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(TrEMBLrel. 13, Last sequence update)
(TrEMBLrel. 17, Last annotation update)
TLLIN BINDING PROTEIN 2).
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                                                                                                                                                                             180:6077-6081(1998).
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Pred. No. 0.054;
7; Mismatches
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01-JUN-2001
01-JUN-2001
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Q99U39;
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InterPro; IPR001460; Transpeptdse.
Pfam; PF009912; Transglycosyl; 1.
Pfam; PF009905; Transpeptldase; 1.
ProDom; PD001895; Transglycosyl; 1.
SEQUENCE 727 AA; 80426 MW; 4D4B
                                                                                                                                                                                                              01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
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Bacteria; Firmicutes; Bacillus/Clostridium group;
Bacillus/Staphylococcus group; Staphylococcus.
STRAIN=FRIEDLIN;
Ivens A.C., Murp
                                                                                           Leishmania major.
Eukaryota; Euglenozoa;
NCBI_TaxID=5664;
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NCBI_TaxID=158879;
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EMBL; AP003133; BAB42543.1;
                                                SEQUENCE FROM N.A.
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Murphy
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Pred. No. 0.05
7; Mismatches
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Harris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81; DB 2;
No. 0.054;
                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         727
                                                                                                                       Trypanosomatidae;
D.,
                                                                                                                                                                                                                                                                                                                   ß
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Oliver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 727;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 727;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shiba T., Hattori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mizutani-Ui Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48
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Lawson
                                                                                                                       Leishmania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kanamori M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
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RESULT
Q9V518
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В
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RA Beeson K.Y., Benos P.V., Berman B.P., Bhandarí D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
RA Bortis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Colson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Doup L.E., Cownes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Hortin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann W.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibeywam C.,
RA Hostin M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Mount S.M., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Rahert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Shue B. G., Siden-Klamos I., Simpson M., Skupski M.P., Smith T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ivens A.C., is Smith D.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                              Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D., Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F., George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X., Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D., Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G., Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D., Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Arumupur.
Pterygota; Neoptera; Endopterygota; Diptera;
Prosophilidae; Drosophila.
               Shide B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T., Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ephydroidea; Drosophilidae;
NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q9V518;
01-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q9V518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hypothetical SEQUENCE 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "A physical map of the Leishmania Genome Res. 8:135-145(1998).
EMBL; AL139794; CAC22658.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N. STRAIN-FRIEDLIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rajandream M.A., Barı
Submitted (JAN-2001)
[2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=20196006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CG12911 PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=98146435;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71 SAGHSGSQRHQHTTTGGGHPYSGRVSVSRSTERTS---PHSKEGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 STGHSGSQ-HSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 51.1
23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          al protein.
300 AA; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         melanogaster (Fruit fly).
Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TrEMBLrel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Barrell B.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PubMed=10731132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PubMed=9477341;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31252 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31.3%;
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13,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Last sequence update)
Last annotation update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 79; DB
Pred. No. 0.04
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1DAB97137FB97B3A CRC64;
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0.042;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jayne J.D.,
, Galle R.F.,
Parson S.N.,
                                                                                                                                                                                                                                                                                                                                                                      Chandra I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
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Search completed: January 28, Job time: 69 sec
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Best Local S
Matches 21
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
Vitale D., Liguori R., Argiriou A.,
Jesse T., Heijnen L., Vos P., Mewes
Bevan M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Arabidopsis thaliana (Mouse-ear cress).

Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnollophyta; eudicotyledons; core eudicots; Rosidae;

eurosids II; Brassicales; Brassicaceae; Arabidopsis.

NCBI_TaxID-3702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     081761
081761;
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EMBL; AE003830; AAF58818.1; -
FlyBase; FBgn0033501; CG12911.

SEQUENCE 397 AA; 43204 MW; E49E427E50C4EC4C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                   EU Arabidopsis sequencing project;
Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AL031032; CAA19875.1; -.
EMBL; AL161584; CAB80110.1; -.
Hypothetical protein.
SEQUENCE 343 AA; 36104 MW; 092E48BA313B242F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
Vitale D., Liguori R., Argiriou A.,
Lemcke K., Mayer K.F.X.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
HYPOTHETICAL 36.1 KDA PROTEIN.
F1715.120 OR AT4G33930.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   289 SSGSGGGSSSSSSSSSSSSSSSGSGSRERERE-RDRERDAQSSSYGG 335
                                                                                                                                                          68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 STGHSGSQHSHTTTQGRSDASRGSSGSRSTSRETRDQEQSGDGSRHSG 48
                                                                                                                                                                                                                     տ
                                                                                                                                                                                                        SGSQHSH---TTTQGRSDASRGSSGSRSTSR---ETRDQEQSGDGSRHSG 48
                                                                                                                                                    SGSNHSSGTGSTHNGHSSGSNHSSATGSTHNGHTSTGSNHSSGNGSRHNG
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                                                                                                                                                                                                                                                                               Similarity 42.0
21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                            30.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30.8%;
37.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , Argiriou A., De Simone V., Hoheisel J., Vos P., Mewes H.W., Mayer K.F.X., Schueller C.,
                             2002, 07:38:39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 77.5; DB Pred. No. 0.082; 7; Mismatches
                                                                                                                                                                                                                                                                           Score 77; DB 10; Length 343; Pred. No. 0.083; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      De
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Simone V., Mewes H.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 5;
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                                                                                                                                                                                                                                                                           6;
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